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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/415,507	10/08/1999	MUKESH DALAL	020431.0562	4917

7590 06/27/2002

BAKER & BOTTS L L P
2001 ROSS AVENUE
DALLAS, TX 752012980

EXAMINER

BACHNER, REBECCA M

ART UNIT PAPER NUMBER

3623

DATE MAILED: 06/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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Office Action Summary

Application No.

09/415,507

Applicant(s)

DALAL, MUKESH

Examiner

Rebecca M Bachner

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Detailed Action

The following is a Final Office Action in response to the communication received on March 5, 2002. Claims 1-47 are still pending. Claims 1-3, 5-7, 11-16, 18-19, 22-24, and 27-30 have been amended and claims 33-47 have been added.

Response to Amendments

1. Applicant's amendments to claims 1-3, 5-7, 11-16, 18-19, 22-24, and 27-30, and the addition of claims 33-47 are sufficient to overcome the §102 rejections set forth in the previous office action. Hence the previous §102 rejections for those claims are withdrawn. However, new §103 rejections have been established.

Applicant's amendments to the drawings are sufficient to overcome the objections set forth in the previous office action. Hence, objections to the drawings are withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al. (P.N. 6,055,519) in view of Blanchard et al.

(Amended) As per claim 1, Kennedy et al. discloses a system for optimizing a request-promise workflow, the system comprising one or more software components associated with a second entity and embodied in computer-readable media and when executed operable to:

establish a demand at the second entity for one or more suppliers by a first entity operable to: produce the supplies; and optimize its production of the supplies using a request for the supplies as a constraint to generate a promise for the supplies (see figure 1, column 3, lines 60-65, through column 4, lines 1-17, and column 6, lines 20-25, the seller negotiates with the buyer and generates a promise for supplies, this promise would be optimal for the seller, the optimization is based upon the constrained supplies);

optimize its production of the demand to generate a request for the supplies; communicate the request to the first entity (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyer can generate an optimal request for supplies to the seller);

Kennedy et al. teach of receiving a promise for the supplies from the first entity based on the request if it satisfies the request (see column 4, lines 41-46, the seller may issue a promise to the buyer). Kennedy et al. do not explicitly teach that the promise was generated according to an optimization of production of the supplies using the request as a constraint, the promise identifying a culprit as a cause for the promise not satisfying the request if the promise does not satisfy the request and generating a

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constraint according to the culprit. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pg. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose reoptimize its production of the demand to generate a new request if the promise does not satisfy the request (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller). However, Kennedy et al. do not disclose that the reoptimized demand is generated according to the culprit. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pg. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

(Amended) As per claim 2, Kennedy et al. discloses all the limitations of the system of claim 1, wherein the first entity is operable to repeat the following until the promise satisfies the request (see figure 1, and column 3, lines 49-67, the computer

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system uses the negotiation engine as a communication link between the seller and the buyer):

receiving a request for the supplies from the second entity (see figure 2, and column 4, lines 25-34, a request for supplies can be received);

reoptimizing its production of the supplies to generate a promise (see figure 2, and column 4, lines 36-47, the production is optimized and a new promise can be requested) ; and

communicating the promise to the second entity (see figure 2, and column 4, lines 57-62, a promise can be communicated).

However, Kennedy does not explicitly teach reoptimizing its production of the supplies using the request for the supplies as a constraint to generate a promise. However, it is a common and well-known technique in the art to reoptimize production using a constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pg. 231- 236). Therefore it would be obvious to one of ordinary skill in the art to use the constraints of the supplies to determine a new promise as it allows the promise to be an optimal alternative.

(Amended) As per claim 3, Kennedy et al. discloses all the limitations of the system of claim 1, further operable to repeat the following until the promise satisfies the request (see figure 2):

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optimizing its production of the demand to generate a request for the supplies; communicating the request to the first entity (see column 3, lines 60-65, through column 4, lines 1-14, the buyer requests supplies to the seller);

Kennedy et al. teach of receiving a promise for the supplies from the first entity based on the request if it satisfies the request (see column 4, lines 41-46, the seller may issue a promise to the buyer). Kennedy et al. do not explicitly teach that the promise was generated according to an optimization of production of the supplies using the request as a constraint, the promise identifying a culprit as a cause for the promise not satisfying the request if the promise does not satisfy the request and generating a constraint according to the culprit. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pg. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose reoptimize its production of the demand to generate a new request if the promise does not satisfy the request (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller). However, Kennedy et al. do not disclose that the reoptimized demand is generated according to the culprit. However, it is a common and well-known technique to optimize according to the

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limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

As per claim 4, Kennedy et al. discloses the system of claim 1, wherein the first entity is further operable to optimize its production of the supplies independently of the second entity; and the second entity is further operable to optimize its production of the demand independently of the first entity (see column 6, lines 25-42, both the buyer and the seller requests are optimal independent of one another).

(Amended) As per claim 5, Kennedy et al. discloses all the limitations of the system of claim 1, wherein the request comprises a first request for a first supply and a second request for a second supply; and the promise comprises a first promise for the first supply and a second promise for the second supply (see figure 1, and column 3, lines 8-19, and 60-65, through column 4, lines 1-17, 41-46, the seller and buyer negotiate to generate a request for supplies from the buyer and a promise for supplies from the seller, the buyer can make two separate requests for supplies and the seller can respond with two different promises).

Kennedy et al. do not disclose the promise identifying the second supply as the culprit if the promise does not satisfy the request. However, it is a common and well-

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known technique in the art to determine the constraints in a supply and demand relationship. Blanchard et al. discloses determining an optimal solution using constrained resources (see pgs. 231- 236). One must determine the culprit, or limiting supply, in order to optimize the relationship between supply and demand. Therefore, it would be obvious to one of ordinary skill in the art to have the promise identify the culprit as it is necessary to determine the limiting resource so that the system can be optimized.

(Amended) As per claim 6, Kennedy et al. discloses all the limitations of the system of claim 5, wherein the second promise does not satisfy the second request, and the second entity is further operable to optimize its production to generate a new request using the second promise for the second supply to generate the constraint (see figure 2, column 4, lines 7-13, and column 6, lines 25-42, a new request is generated, it uses the promise to generate the new request).

Kennedy et al. do not disclose the promise identifying the second supply as the culprit if the promise does not satisfy the request. However, it is a common and well-known technique in the art to determine the constraints in a supply and demand relationship. Blanchard et al. discloses determining an optimal solution using constrained resources (see pgs. 231- 236). One must determine the culprit, or limiting supply, in order to optimize the relationship between supply and demand. Therefore, it would be obvious to one of ordinary skill in the art to have the promise identify the

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culprit as it is necessary to determine the limiting resource so that the system can be optimized.

(Amended) As per claim 7, Kennedy et al. discloses all the limitations of the system of claim 1, wherein: the request comprises a bundled request for at least two supplies to produce the demand (see column 3, lines 8-14, and column 4, lines 25-34, the request from the buyer can comprise more than one supply);

the promise in response to the bundled request comprises a first promise, a second promise, and the culprit identifying the second promise as the cause for the promise not satisfying the bundled request (see column 3, lines 8-14, and column 14, lines 52-67, through all of columns 15 and 16, the seller can issue promises in response to the bundled request, the system identifies why a promise was not satisfied); and

the second entity is operable to reoptimize its production to generate a new request using the second promise to generate the constraint (see figure 2, column 5, lines 21-25, and column 6, lines 25-42, the new request from the buyer will be optimal and will use the old promise as a constraint).

As per claim 8, Kennedy et al. discloses all the limitations of the system of claim 1, wherein the promise comprises an optimization objective and a promise constraint; and the second entity is operable to reoptimize its production to generate a new request using the promise constraint and the optimization objective (see figure 2, column 4,

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lines 25-55, and column 6, lines 25-42, the promise and the request are optimized using the promise as a constraint).

As per claim 9, Kennedy et al. discloses all the limitations of the system of claim 1, wherein the second entity is operable to generate a request in accordance with one or more internal resources (see column 4, lines 25-34, and column 14, lines 7-11, the second entity can generate a request and this request can made in accordance with a variety of different factors including internal resources).

As per claim 10, Kennedy et al. discloses the system of claim 1, wherein the second entity is operable to communicate a demand promise to a client if the promise satisfies the request (see figure 2, and column 4, lines 48-55, after the seller communicates a satisfactory promise, the buyer can communicate a demand promise).

(Amended) As per claim 11, Kennedy et al. discloses a method for optimizing a request-promise workflow, the method comprising: establishing a demand associated with one or more supplies are needed to satisfy the demand; assuming that the supplies are unlimited; optimizing the production of the demand to generate a request for the supplies needed to satisfy the demand (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the seller negotiates with the buyer and generates a promise for supplies, this promise would be optimal for the seller);

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communicating the request to a supplier (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyer can generate an optimal request for supplies to the seller);

Kennedy et al. teach of receiving a promise from the supplier (see column 4, lines 41-46, the seller may issue a promise to the buyer). Kennedy et al. do not explicitly teach that the promise was generated according to an optimization of production of the supplies using the request as a constraint, the promise identifying a culprit as a cause for the promise not satisfying the request if the promise does not satisfy the request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose determining whether the promise satisfies the request; and if the promise does not satisfy the request, reoptimizing the production of the demand to generate a new request (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller). However, Kennedy et al. do not disclose generating a constraint according to the culprit and that the reoptimized demand is generated according to the culprit. However, it is a common and well-known technique

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to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

(Amended) As per claim 12, Kennedy et al. discloses all the limitations of the method of claim 11, further comprising repeating the following until the promise satisfies the request: optimizing the production of the demand to generate a request for the supplies needed to satisfy the demand; communicating the request to the supplier (see column 3, lines 60-65, through column 4, lines 1-14, the buyer requests an optimal number of supplies from the seller);

Kennedy et al. teach of receiving a promise from the supplier and determining whether the promise satisfies the request (see column 4, lines 41-46, the seller may issue a promise to the buyer). Kennedy et al. do not explicitly teach the promise identifying a culprit as a cause for the promise not satisfying the request if the promise does not satisfy the request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to

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optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose if the promise does not satisfy the request, reoptimizing the production of the demand to generate a new request (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller). However, Kennedy et al. do not disclose generating a constraint according to the culprit and that the reoptimized demand is generated according to the constraint. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

(Amended) As per claim 13, Kennedy et al. discloses all the limitations of the method of claim 11, wherein: the request comprises a first request for a first supply and a second request for a second supply; and the promise comprises a first promise for the first supply and a second promise for the second supply (see figure 1, and column 3, lines 8-19, and 60-65, through column 4, lines 1-17, 41-46, the seller and buyer negotiate to generate a request for supplies from the buyer and a promise for supplies from the seller, the buyer can make two separate requests for supplies and the seller can respond with two different promises).

Kennedy et al. do not disclose the promise identifying the second supply as the culprit if the promise does not satisfy the request. However, it is a common and well-known technique in the art to determine the constraints in a supply and demand relationship. Blanchard et al. discloses determining an optimal solution using constrained resources (see pgs. 231- 236). One must determine the culprit, or limiting supply, in order to optimize the relationship between supply and demand. Therefore, it would be obvious to one of ordinary skill in the art to have the promise identify the culprit as it is necessary to determine the limiting resource so that the system can be optimized.

(Amended) As per claim 14, Kennedy et al. discloses all the limitations of the method of claim 13, wherein reoptimizing the production of the demand to generate a new request further comprises using the second promise for the second supply to generate the constraint (see figure 2, column 4, lines 7-13, and column 6, lines 25-42, a new request is generated, it uses the new information to generate the new request).

Kennedy et al. do not disclose the promise identifying the second supply as the culprit if the promise does not satisfy the request. However, it is a common and well-known technique in the art to determine the constraints in a supply and demand relationship. Blanchard et al. discloses determining an optimal solution using constrained resources (see pgs. 231- 236). One must determine the culprit, or limiting supply, in order to optimize the relationship between supply and demand. Therefore, it would be obvious to one of ordinary skill in the art to have the promise identify the

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culprit as it is necessary to determine the limiting resource so that the system can be optimized.

(Amended) As per claim 15, Kennedy et al. discloses all the limitations of the method of claim 11, wherein: the request comprises a bundled request ~~having~~ comprising a first request for a first supply and a second request for a second supply (see column 3, lines 8-14, and column 4, lines 25-34, the request from the buyer can comprise more than one supply); and

the promise comprises a first promise, a second promise, and the culprit identifying the second promise as the cause for not satisfying the bundled request (see column 3, lines 8-14, and column 14, lines 52-67, through all of columns 15 and 16, the seller can issue a bundled promise, the system identifies why a promise was not satisfied).

(Amended) As per claim 16, Kennedy et al. discloses all the limitations of the method of claim 15, wherein reoptimizing the production of the demand to generate a new request further comprises using the second promise for the second supply to generate the constraint (see figure 2, column 4, lines 7-13, and column 6, lines 25-42, a new request is generated, it uses the new information to generate the new request).

As per claim 17, Kennedy et al. discloses all the limitations of the method of claim 15, wherein the bundled request comprises the supplies required for one demand

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(see column 3, lines 8-19, and column 4, 25-34, the buyer can request more than one supply to meet its demand).

(Amended) As per claim 18, Kennedy et al. discloses all the limitations of the method of claim 11, wherein: the promise comprises an optimization objective and a promise constraint; and reoptimizing the production of the demand to generate a new request further comprises reoptimizing using the promise constraint and the optimization objective (see figure 2, column 4, lines 25-55, and column 6, lines 25-42, the promise and the request are optimized using the promise as a constraint).

(Amended) As per claim 19, Kennedy et al. discloses all the limitations of the method of claim 11, wherein: optimizing the production of the demand to generate a request of the supplies needed to satisfy the demand further comprises generating the request in accordance with one or more internal resources (see column 3, lines 8-14, column 4, lines 25-34, and column 14, lines 7-11, the request from the buyer will be made to satisfy the demand and will be in accordance with factors such as internal resources); and

reoptimizing the production of the demand to generate a new request further comprises generating the new request in accordance with the one or more internal resources (see figure 2, column 5, lines 21-25, column 6, lines 25-42, and column 14, lines 7-11, the new request from the buyer will be in accordance with a other factors such as internal resources).

As per claim 20, Kennedy et al. discloses all the limitations of the method of claim 11, wherein determining whether the promise satisfies the request comprises determining whether the promise falls within an acceptable range (see column 6, lines 56-59, in order for an acceptance, the promise and request must fall within an acceptable range).

As per claim 21, Kennedy et al. discloses all the limitations of the method of claim 11, further comprising communicating a demand promise to a client if the promise satisfies the request (see figure 2, and column 4, lines 48-55, after the seller communicates a satisfactory promise, the buyer can communicate a demand promise).

As per claim 22, Kennedy et al. discloses a method for optimizing a request-promise workflow, the method comprising: establishing a demand associated with one or more supplies needed to satisfy the demand; assuming that the supplies are unlimited; optimizing the production of the demand to generate a first request for a first supply and a second request for a second supply needed to satisfy the demand; communicating the first request to a first supplier; communicating the second request to a second supplier (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyers can generate optimal requests for supplies to the sellers);

Kennedy et al. teach of receiving a first promise for the first supply from the first supplier and receiving a second promise for the second supply from the second supplier

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(see figure 2, and column 4, lines 41-46, the seller issues a promise to the buyer).

Kennedy et al. do not explicitly teach that the first promise identifies a first culprit as a cause for the first promise not satisfying the first request if the first promise does not satisfy the first request; and that the second promise identifies a second culprit as a cause for the second promise not satisfying the second request if the second promise does not satisfy the second request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose determining whether the first promise satisfies the first request; determining whether the second promise satisfies the second request; and if the first promise does not satisfy the first request or the second promise does not satisfy the second request, and reoptimizing the production of the demand to generate a new first request and a new second request (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller). However, Kennedy et al. do not disclose generating a constraint according to the first culprit or the second culprit, and that the reoptimized demand is generated according to the constraint. However, it is a common and well-known technique to optimize according to the limitations set forth by

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the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

(Amended) As per claim 23, Kennedy et al. discloses all the limitations of the method of claim 22, further comprising repeating the following until the first promise satisfies the first request and the second promise satisfies the second request (see figure 2):

optimizing the production of the demand to generate a first request for a first supply and a second request for a second supply needed to satisfy the demand; communicating the first request to the first supplier; communicating the second request to the second supplier (see column 3, lines 60-65, through column 4, lines 1-14, the buyers issue requests to the suppliers);

Kennedy et al. teach of receiving a first promise from the first supplier and receiving a second promise for the second supply from the second supplier (see column 4, lines 41-46, the seller may issue a promise to the buyer). Kennedy et al. do not explicitly teach that the first promise identifying a first culprit as a cause for the first promise not satisfying the first request is the first promise does not satisfy the first request and the second promise identifying a second culprit as a cause for the second promise not satisfying the second request if the second promise does not satisfy the

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second request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose determining whether the first promise satisfies the first request; determining whether the second promise satisfies the second request; and if the first promise does not satisfy the first request or the second promise does not satisfy the second request, and reoptimizing the production of the demand in accordance with the constraint to generate a new first request and a new second request (see figure 1, and column 4, lines 25-34, the buyers can generate new requests). However, Kennedy et al. do not disclose generating a constraint according to the first culprit or the second culprit. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

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(Amended) As per claim 24, Kennedy et al. discloses all the limitations of the method of claim 22, wherein: reoptimizing the production of the demand to generate a new first request and a new second request further comprises using the second promise to generate the constraint (see figure 2, column 4, lines 7-13, and column 6, lines 25-42, a new request is generated, it uses the promise to generate the new request).

Kennedy et al. do not disclose the promise identifying the second supply as the culprit if the promise does not satisfy the request. However, it is a common and well-known technique in the art to determine the constraints in a supply and demand relationship. Blanchard et al. discloses determining an optimal solution using constrained resources. One must determine the culprit, or limiting supply, in order to optimize the relationship between supply and demand. Therefore, it would be obvious to one of ordinary skill in the art to have the promise identify the culprit as it is necessary to determine the limiting resource so that the system can be optimized.

As per claim 25, Kennedy et al. discloses all the limitations of the method of claim 22, wherein the request comprises a bundled request for one or more supplies required for one demand (see column 3, lines 8-19, and column 4, 25-34, the buyer can request more than one supply to meet its demand).

As per claim 26, Kennedy et al. discloses all the limitations of the method of claim 25, wherein the request further comprises a sub-bundled request for the supplies

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supplied by the first supplier (see column 3, lines 8-14, and column 4, lines 25-34, the request from the buyer to the seller can comprise more than one supply).

(Amended) As per claim 27, Kennedy et al. discloses al the limitations of the method of claim 26, further comprising: receiving a first promise for the first supply from the first supplier the first promise comprising the first culprit identifying a culprit promise that does not satisfy the sub-bundled request (see column 3, lines 8-14, and column 14, lines 52-67, through all of columns 15 and 16, the seller can issue a bundled promise, the system identifies why a promise was not satisfied); and

reoptimizing the production of the demand to generate a new first request and a new second request (see figure 2, column 5, lines 21-25, and column 6, lines 25-42, the new request from the buyer will use the old promise as a constraint).

Kennedy et al. do not explicitly teach that the first promise comprising the first culprit promise that does not satisfy a first sub-bundled request and reoptimizing using the culprit promise to generate the constraint. However, identifying a limiting resource for optimizing a system is an old and well-known technique in the art. Blanchard et al. disclose optimizing with a constrained resource (see pgs. 231- 236). By identifying the culprit, one can then create a promise using the limiting constraint. Therefore, it would be obvious for one of ordinary skill in the art to determine the culprit and use that constraint as it allows one to quickly and efficiently maximize the request.

(Amended) As per claim 28, Kennedy et al. discloses all the limitations of the method of claim 26, further comprising: receiving a first promise for the first supply from the first supplier (see column 3, lines 8-14, and column 14, lines 52-67, through all of columns 15 and 16, the seller can issue a bundled promise, the system identifies why a promise was not satisfied);

receiving a second promise for the second supply from the second supplier, the second promise comprising a second culprit promise that does not satisfy a second sub-bundled request, the second sub bundled promise being larger than the first sub-bundled promise (see column 3, lines 8-14, and column 14, lines 52-67, through all of columns 15 and 16, the seller can issue a bundled promise, the system identifies why a promise was not satisfied);

reoptimizing the production of the demand to generate a new first request and a new second request (see figure 2, column 5, lines 21-25, and column 6, lines 25-42, the new request from the buyer will be optimal and will use the old promise as a constraint).

Kennedy et al. do not explicitly teach that the first promise comprising the first culprit promise that does not satisfy a first sub-bundled request, the second promise comprising the second culprit promise that does not satisfy a second sub-bundled request and reoptimizing using the culprit promise to generate the constraint. However, identifying a limiting resource for optimizing a system is an old and well-known technique in the art. Blanchard et al. disclose optimizing with a constrained resource (see pg. 231- 236). By identifying the culprit, one can then create a promise using the

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limiting constraint. Therefore, it would be obvious for one of ordinary skill in the art to determine the culprit and use that constraint as it allows one to quickly and efficiently maximize the request.

(Amended) As per claim 29, Kennedy et al. discloses all the limitations of the method of claim 22, wherein: the first promise comprises an optimization objective and a promise constraint; and reoptimizing the production of the demand to generate a new first request and a new second request further comprises reoptimizing using the promise constraint and the optimization objective (see figure 2, column 4, lines 25-55, and column 6, lines 25-42, the promise and the request are optimized using the promise as a constraint).

As per claim 30, Kennedy et al. discloses all the limitations of the method of claim 22, wherein: optimizing the production of the demand to generate a first request for a first supply and a second request for a second supply needed to satisfy the demand further comprises generating the first request in accordance with one or more internal resources (see column 3, lines 8-14, column 4, lines 25-34, and column 14, lines 7-11, the request from the buyer will be made to satisfy the demand and will be in accordance with factors such as internal resources); and

reoptimizing the production of the demand to generate a new first request and a new second request further comprises generating the new first request and a new second request in accordance with the one or more internal resources (see figure 2,

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column 5, lines 21-25, column 6, lines 25-42, and column 14, lines 7-11, the new request from the buyer will be in accordance with other factors such as internal resources).

As per claim 31, Kennedy et al. discloses all the limitations of the method of claim 22, wherein determining whether the first promise satisfies the first request comprises determining whether the first promise falls within an acceptable range (see column 6, lines 56-59, in order for an acceptance, the promise and request must fall within an acceptable range).

As per claim 32, Kennedy et al. discloses all the limitations of the method of claim 22, further comprising communicating a demand promise to a client if the first promise satisfies the first request and the second promise satisfies the second request (see figure 2, and column 4, lines 48-55, after the seller communicates a satisfactory promise, the buyer can communicate a demand promise).

(New) As per claim 33, Kennedy et al. disclose system for optimizing a request-promise workflow, the system comprising one or more software components embodied in computer-readable media and when executed operable to:

establish a demand associated with one or more supplies needed to satisfy the demand (see figure 1, column 3, lines 60-65, through column 4, lines 1-17, and column 6, lines 20-25, the seller negotiates with the buyer and generates a promise for

supplies, this promise would be optimal for the seller, the optimization is based upon the constrained supplies);

optimize production of the demand to generate a first request for a first supply and a second request for a second supply needed to satisfy the demand; communicate the first request to a first supplier; communicate the second request to a second supplier (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyer can generate an optimal request for supplies to the seller); and

determine whether the first promise satisfies the first request; determine whether the second promise satisfies the second request (see figure 2, column 4, lines 25-56, it is determined if the promise satisfies the request).

Kennedy et al. teach of receiving a first promise for the first supply from the first supplier, and receiving a second promise for the second supply from the second supplier (see column 4, lines 41-46, the seller may issue a promise to the buyer).

Kennedy et al. do not explicitly teach that the first promise identifies a first culprit as a cause for the first promise not satisfying the first request if the first promise does not satisfy the first request and that the second promise identifies a second culprit as a cause for the second promise not satisfying the second request if the first promise does not satisfy the second request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al.

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Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose that if the first promise does not satisfy the first request or the second promise does not satisfy the second request, then reoptimize the production of the demand in accordance with the constraint to generate a new first request and a new second request (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller). However, Kennedy et al. do not disclose that the reoptimized demand is generated according to a first or second culprit. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

Kennedy et al. do explicitly teach that they assume that the supplies are unlimited. However, it is common in optimization problems to allow supplies to be unlimited. Blanchard et al. teaches of creating optimization problems with unlimited resources (see pg. 211). Therefore, it would be obvious to one of ordinary skill in the art to create a problem that allows supplies to be unlimited as it can be solved more efficiently.

(New) As per claim 34, Kennedy et al. disclose the system of claim 33, operable to repeat the following until the first promise satisfies the first request and the second promise satisfies the second request;

optimizing production of the demand to generate a first request for a first supply and a second request for second supply needed to satisfy the demand (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyer can generate an optimal request for supplies to the seller);

communicating the first request to the first supplier; communicating the second request to the second supplier; and

determining whether the first promise satisfies the first request; and determining whether the second promise satisfies the second request (see figure 2, column 4, lines 25-56, it is determined if the promised satisfy the requests).

Kennedy et al. teach of receiving a first promise for the first supply from the first supplier, and receiving a second promise for the second supply from the second supplier (see column 4, lines 41-46, the seller may issue a promise to the buyer).

Kennedy et al. do not explicitly teach that the first promise identifies a first culprit as a cause for the first promise not satisfying the first request if the first promise does not satisfy the first request and that the second promise identifies a second culprit as a cause for the second promise not satisfying the second request if the first promise does not satisfy the second request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution

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of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose that if the first promise does not satisfy the first request or the second promise does not satisfy the second request, then reoptimize the production of the demand in accordance with the constraint to generate a new first request and a new second request (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller). However, Kennedy et al. do not disclose that the reoptimized demand is generating a constraint according to a first or second culprit. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

(New) As per claim 35, Kennedy et al. disclose the system of claim 33, wherein: reoptimizing the production of the demand to generate a new first request and a new second request further comprises using the second promise to generate the constraint

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(see figure 2, column 4, lines 7-13, and column 6, lines 25-42, a new request is generated, it uses the promise to generate the new request).

Kennedy et al. do not disclose that if the second promise does not satisfy the second request, the second promise identifies the second culprit. However, it is a common and well-known technique in the art to determine the constraints in a supply and demand relationship. Blanchard et al. discloses determining an optimal solution using constrained resources (see pgs. 231-236). One must determine the culprit, or limiting supply, in order to optimize the relationship between supply and demand. Therefore, it would be obvious to one of ordinary skill in the art to have the promise identify the culprit as it is necessary to determine the limiting resource so that the system can be optimized.

(New) As per claim 36, Kennedy et al discloses the system of claim 33, wherein the request comprises a bundled request for one or more supplies required for one demand (see column 3, lines 8-14, and column 4, lines 25-34, the request from the buyer can comprise more than one supply).

(New) As per claim 37, Kennedy et al. discloses the system of claim 36, wherein the request further comprises a sub-bundled request for the supplies supplied by the first supplier (see column 3, lines 8-20, the request comprises a sub-bundled request for supplies).

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(New) As per claim 38, Kennedy et al. disclose the system of claim 37, further operable to: receive a first promise for the first supply from the first supplies (see column 3, lines 8-14, and column 14, lines 52-67, through all of columns 15 and 16, the seller can issue a bundled promise, the system identifies why a promise was not satisfied); and

reoptimize the production of the demand to generate a new first request and a new second request (see figure 2, column 5, lines 21-25, and column 6, lines 25-42, the new request from the buyer will use the old promise as a constraint).

Kennedy et al. do not explicitly teach that the first promise comprises the first culprit identifying a culprit promise that does not satisfy the sub-bundled request and reoptimizing using the culprit promise to generate the constraint. However, identifying a limiting resource for optimizing a system is an old and well-known technique in the art. Blanchard et al. disclose optimizing with a constrained resource (see pgs. 231- 236). By identifying the culprit, one can then create a promise using the limiting constraint. Therefore, it would be obvious for one of ordinary skill in the art to determine the culprit and use that constraint as it allows one to quickly and efficiently maximize the request.

(New) As per claim 39, Kennedy et al. disclose the system of claim 37, further operable to: receive a first promise for the first supply from the first supplier (see column 3, lines 8-14, and column 14, lines 52-67, through all of columns 15 and 16, the seller can issue a bundled promise, the system identifies why a promise was not satisfied);

receive a second promise for the second supply from the second supplier,, the second sub-bundled promise being larger than the first sub-bundled promise (see column 3, lines 8-14, and column 14, lines 52-67, through all of columns 15 and 16, the seller can issue a bundled promise, the system identifies why a promise was not satisfied); and

reoptimize the production of the demand to generate a new first request and a new second request (see figure 2, column 5, lines 21-25, and column 6, lines 25-42, the new request from the buyer will use the old promise as a constraint).

Kennedy et al. do not explicitly teach that the first promise comprising the first culprit promise that does not satisfy a first sub-bundled request, the second promise comprising the second culprit promise that does not satisfy a second sub-bundled request and reoptimizing using the culprit promise to generate the constraint. However, identifying a limiting resource for optimizing a system is an old and well-known technique in the art. Blanchard et al. disclose optimizing with a constrained resource (see pgs. 231- 236). By identifying the culprit, one can then create a promise using the limiting constraint. Therefore, it would be obvious for one of ordinary skill in the art to determine the culprit and use that constraint as it allows one to quickly and efficiently maximize the request.

(New) As per claim 40, Kennedy et al. disclose the system of claim 33, further operable to reoptimize production of the demand to generate a new first request and a new second request by reoptimizing using a promise constraint and an optimization

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objective, the first promise comprising the optimization objective and the promise constraint (see figure 2, column 4, lines 25-55, and column 6, lines 25-42, the promise and the request are optimized using the promise as a constraint).

(New) As per claim 41, Kennedy et al. disclose the system of claim 33, further operable to: optimize the production of the demand to generate a first request for a first supply and a second supply needed to satisfy the demand by generating the first request in accordance with one or more internal resources (see column 3, lines 8-14, column 4, lines 25-34, and column 14, lines 7-11, the request from the buyer will be made to satisfy the demand and will be in accordance with factors such as internal resources); and

reoptimize the production of the demand to generate a new first request and a new second request by generating the new first request and a new second request in accordance with the one or more internal resources (see figure 2, column 5, lines 21-25, column 6, lines 25-42, and column 14, lines 7-11, the new request from the buyer will be in accordance with other factors such as internal resources).

(New) As per claim 42, Kennedy et al. disclose the system of claim 33, further operable to determine whether the first promise satisfies the request by determining whether the first promise falls within an acceptable range (see column 6, lines 56-59, in order for an acceptance, the promise and request must fall within an acceptable range).

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(New) As per claim 43, Kennedy et al. disclose the system for claim 33, further operable to communicate a demand promise to a client if the first promise satisfies the first request and the second promise satisfies the second request (see figure 2, and column 4, lines 48-55, after the seller communicates a satisfactory promise, the buyer can communicate a demand promise).

(New) As per claim 44, Kennedy et al. disclose the software for optimizing a request-promise workflow, the software embodied in computer-readable media and when executed operable to:

establish a demand associated with one or more supplies needed to satisfy the demand (see figure 1, column 3, lines 60-65, through column 4, lines 1-17, and column 6, lines 20-25, the seller negotiates with the buyer and generates a promise for supplies, this promise would be optimal for the seller, the optimization is based upon the constrained supplies);

optimize production of the demand to generate a request for the supplies needed to satisfy the demand; communicate the request to the supplier (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyer can generate an optimal request for supplies to the seller); and

determine whether the promise satisfies the request (see figure 2, column 4, lines 25-56, it is determined if the promise satisfies the request).

Kennedy et al. teach of receiving receive a promise from the supplier (see column 4, lines 41-46, the seller may issue a promise to the buyer). Kennedy et al. do

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not explicitly teach that the promise identifies a culprit as a cause for the promise not satisfying the request if the promise does not satisfy the request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose that if the first promise does not satisfy the first request, reoptimize the production of the demand using the constraint to generate a new request for communication to the supplier (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller). However, Kennedy et al. do not disclose that the reoptimized demand is generated according to the culprit. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

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Kennedy et al. do not explicitly teach that they assume that the supplies are unlimited. However, it is common in optimization problems to allow supplies to be unlimited. Blanchard et al. teaches of creating optimization problems with unlimited resources (see pg. 211). Therefore, it would be obvious to one of ordinary skill in the art to create a problem that allows supplies to be unlimited as it can be solved more efficiently.

As per claim 45, Kennedy et al. disclose the software for optimizing a request-promise workflow, the software embodied in computer-readable media and when executed operable to:

establish a demand associated with one or more supplies needed to satisfy the demand (see figure 1, column 3, lines 60-65, through column 4, lines 1-17, and column 6, lines 20-25, the seller negotiates with the buyer and generates a promise for supplies, this promise would be optimal for the seller, the optimization is based upon the constrained supplies);

optimize production of the demand to generate a first request for a first supply and a second request for a second supply needed to satisfy the demand; communicate the first request to a first supplier; communicate the second request to a second supplier (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyer can generate an optimal request for supplies to the seller);

determine whether the first promise satisfies the first request; and determine whether the second promise satisfies the second request (see figure 2, column 4, lines 25-56, it is determined if the promises satisfy the requests).

Kennedy et al. teach of receiving a first promise for the first supply from the first supplier, and receiving a second promise for the second supply from the second supplier (see column 4, lines 41-46, the seller may issue a promise to the buyer).

Kennedy et al. do not explicitly teach that the first promise identifies a first culprit as a cause for the first promise not satisfying the first request if the first promise does not satisfy the first request and that the second promise identifies a second culprit as a cause for the second promise not satisfying the second request if the first promise does not satisfy the second request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose that if the first promise does not satisfy the first request, or the second promise does not satisfy the second request, then reoptimize the production of the demand in accordance with the constraint to generate a new first request and a new second request (see figure 1, and column 4, lines 25-34, the buyer

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can issue a new optimal request to the seller). However, Kennedy et al. do not disclose that the reoptimized demand generates a constraint according to the first culprit or the second culprit. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

Kennedy et al. do not explicitly teach that they assume that the supplies are unlimited. However, it is common in optimization problems to allow supplies to be unlimited. Blanchard et al. teaches of creating optimization problems with unlimited resources (see pg. 211). Therefore, it would be obvious to one of ordinary skill in the art to create a problem that allows supplies to be unlimited as it can be solved more efficiently.

As per claim 46, Kennedy et al. disclose a system for optimizing a request-promise workflow, the method comprising:

Means for establishing a demand associated with one or more supplies needed to satisfy the demand (see figure 1, column 3, lines 60-65, through column 4, lines 1-17, and column 6, lines 20-25, the seller negotiates with the buyer and generates a promise for supplies, this promise would be optimal for the seller, the optimization is based upon the constrained supplies);

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Means for optimizing the production of the demand to generate a request for the supplies needed to satisfy the demand; Means for communicating the request to a supplier (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyer can generate an optimal request for supplies to the seller);

Kennedy et al. teach of means for receiving a promise from the supplier (see column 4, lines 41-46, the seller may issue a promise to the buyer). Kennedy et al. do not explicitly teach that the promise identifying a culprit as a cause for the promise not satisfying the request if the promise does not satisfy the request. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources (see pgs. 231- 236). The identification of a culprit is merely the identification of the constrained resource taught by Blanchard et al. Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production and to identify a culprit as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly.

Kennedy et al. disclose means for determining whether the promise satisfies the request and if the first promise does not satisfy the request, reoptimizing the production of the demand to generate a new request for communication to the supplier (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller).

However, Kennedy et al. do not disclose means for generating a constraint according to the culprit and reoptimizing the production of the demand using the

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constraint generated according to the constraint. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resource. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraint generated according to the culprit to generate a new request as the new request will be the optimal solution within the limitations due to the culprit.

Kennedy et al. do not explicitly teach that they assume that the supplies are unlimited. However, it is common in optimization problems to allow supplies to be unlimited. Blanchard et al. teaches of creating optimization problems with unlimited resources (see pg. 211). Therefore, it would be obvious to one of ordinary skill in the art to create a problem that allows supplies to be unlimited as it can be solved more efficiently.

As per claim 47, Kennedy et al. disclose a method for optimizing a request-promise workflow, the method comprising:

establishing a demand associated with one or more supplies needed to satisfy the demand; (see figure 1, column 3, lines 60-65, through column 4, lines 1-17, and column 6, lines 20-25, the seller negotiates with the buyer and generates a promise for supplies, this promise would be optimal for the seller, the optimization is based upon the constrained supplies);

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repeating the following until the promise satisfies the request (see figure 2, the following is repeated until the promise satisfies the request):

optimizing the production of the demand to generate a request for the supplies needed to satisfy the demand, the request comprising a first request for a first supply and a second request for a second supply; communicating the request to a supplier (see figure 1, and column 3, lines 60-65, through column 4, lines 1-17, the buyer can generate an optimal request for supplies to the seller);

Kennedy et al. teach of receiving a promise for the supplier, the promise comprises a first promise for the first supply and a second promise for the second supply (see column 4, lines 41-46, the seller may issue a promise to the buyer).

Kennedy et al. do not explicitly teach that the promise identifying a culprit comprising the second supply as a cause for the promise not satisfying the request if the promise does not satisfy the request, the promise comprising an optimization objective and a promise constraint. However, it is common in the art to determine a response to a promise by optimizing production using constraints. Blanchard et al. teach the constrained classical optimization problem by determining the optimal solution of a problem using constrained resources in an optimization function (see pgs. 231- 236). Therefore, it would be obvious to one of ordinary skill in the art to use the constraints to optimize production using an optimization function and constraints as it allows the supplier to efficiently determine the constraints on the system and optimize accordingly

Kennedy et al. disclose determining whether the promise satisfies the request and that if the first promise does not satisfy the request, then reoptimize the production

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of the demand to generate a new request for communication to the supplier (see figure 1, and column 4, lines 25-34, the buyer can issue a new optimal request to the seller).

However, Kennedy et al. do not disclose that the reoptimized demand generates a constraint according to the culprit, and reoptimizing the production of the demand in accordance with the constraint, the promise constraint, and the optimization objective. However, it is a common and well-known technique to optimize according to the limitations set forth by the constrained resources. Blanchard et al. discloses optimizing with a constrained resource (see pgs. 231- 236). Therefore, it would be obvious to one skilled in the art to reoptimize the production of the demand using the constraints generated according to the culprit as the new request will be the optimal solution within the limitations.

Response to Arguments

4. Applicant's arguments with regard to the §102 rejections based on Kennedy et al. have been fully considered. In the remarks, the Applicant argues that 1) Kennedy et al. fail to disclose a promise identifying a culprit for the promise not satisfying the request and 2) Kennedy et al. do not disclose a promise comprising an optimization objective and a promise constraint.

In response to Applicant's argument 1), Kennedy et al. do disclose a promise not being able to satisfy a request (see column 3). Kennedy et al. also disclose the use of constraints and that the goal is to optimize the demand and the supplier requests and promises. By having a system that exchanges requests and promises for an optimal

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solution, the system cannot satisfy every request as there are constraints. These constraints are the resources which are exchanged in the requests and promises. The applicant has defined the culprit as "at least one supply that caused the shortage" (see specification, pg. 17). The culprit, therefore is a constraint on the system. Although Kennedy et al. do not explicitly state that they identify the culprit, Kennedy et al. must internally identify a culprit in order to reject the request. The Examiner acknowledges that Kennedy et al. do not explicitly disclose this culprit. However, it is known in the art that any optimization problem that contains constraints has a limiting constraint or culprit. Blanchard et al. is a textbook that discloses an optimization problem with limited constraints (see pgs. 231- 236). The most limiting constraint, or culprit, is identified. Therefore, Kennedy et al. and Blanchard et al. together explicitly disclose a promise identifying a culprit for the promise not satisfying the request.

In response to Applicant's argument 2), Kennedy et al. discloses optimizing the request and promise system (see column 6, lines 25-27). Again, Kennedy et al. discloses a system exchanging optimal requests and promises with the use of constraints (see column 6, lines 20-24). These constraints are the resources which are exchanged in the requests and promises. Furthermore, the entire exchange of promises and requests is based upon an optimization of constraints. Therefore, the optimization objective and the promise constraints must inherently be used in Kennedy's system.

Therefore, based on the reasons stated above, the Applicant's arguments are found persuasive and the §102 rejection is withdrawn. However, a new §103 rejection for claims 1-47 has been established.

Conclusion

5. No claims allowed.
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant of to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ye (P.N. 6374227) discusses a system and method for optimizing the allocation of a resource.

Conklin et al. (P.N. 6141653) discuss a system with a negotiations engine for bargaining between buyers and sellers.

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Smirnov et al. (P.N. 6321133) discuss a method for an order promising workflow system in a manufacturing environment.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rebecca Bachner whose telephone number is 703-305-1872. The examiner can normally be reached Monday - Friday from 8:00am to 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 703-305-9643.

The fax numbers for the organization where this application or proceeding is assigned are as follows:


703-746-7238 [After Final Communication]

703-746-7239 [Official Communications]

703-746-7240 [For status inquiries, draft communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

RMB
RMB
May 28, 2002


KYLE J. CHOI
PRIMARY EXAMINER
Art Unit 3623